B. AMENDMENTS TO THE CLAIMS

Claims 1-89 are cancelled without prejudice.

90. (new) A ball bat comprising:

a substantially tubular frame extending along a longitudinal axis having a handle portion and a primary hitting portion, the hitting portion including a proximal region, a distal region, and first and second tubular wall transition regions, the first tubular wall transition region positioned closer to the proximal region than the second tubular wall transition region, the wall thickness of the first tubular wall transition region generally increasing along the longitudinal axis from the proximal region toward the distal region, and the wall thickness of the second tubular wall transition region generally increasing along the longitudinal axis from the distal region toward the proximal region.

91. (new) The ball bat of claim 90, wherein the first and second tubular wall transition regions each have a length within the range of 0.25 to 7.0 inches.

92. (new) The ball bat of claim 90, wherein the first and second tubular wall transition regions each have a length within the range of 0.50 to 5.0 inches.

93. (new) The ball bat of claim 90, wherein the first and second tubular wall transition regions each have a length within the range of 2.0 to 4.0 inches.

94. (new) The ball bat of claim 90, wherein the hitting portion further includes an intermediate tubular region having generally uniform wall thickness and positioned between the first and second tubular wall transition regions.

95. (new) The ball bat of claim 94, wherein the intermediate tubular region has a length within the range of 0.25 to 9.0 inches.

96. (new) The ball bat of claim 94, wherein the intermediate tubular region has a length within the range of 0.1 to 5.0 inches.

97. (new) The ball bat of claim 90, wherein at least one of the proximal and distal regions has a generally uniform wall thickness.

98. (new) The ball bat of claim 90, wherein the difference in wall thickness from a first end of the first tubular wall transition region to a second end of the first tubular wall transition region is within the range of 0.003 to 0.040 inches, and the difference in wall thickness from a first end of the second tubular wall transition region to a second end of the second tubular wall transition region is within the range of 0.003 to 0.040 inches.

99. (new) The ball bat of claim 98, the difference in wall thickness of the first tubular wall transition region is within the range of 0.005 to 0.015 inches, and wherein the difference in wall thickness of the second tubular wall transition region is within the range of 0.005 to 0.015 inches.

100. (new) The ball bat of claim 90, wherein the wall thickness of the first tubular wall transition region generally increases linearly along the longitudinal axis from the first position, generally near the proximal end, toward the distal end.

101. (new) The ball bat of claim 90, wherein the wall thickness of the second tubular wall transition region generally increases linearly along the longitudinal axis from the second position, generally near the distal end, toward the proximal end.

102. (new) The ball bat of claim 90, wherein the wall thickness of the first tubular wall transition region generally increases non-linearly along the longitudinal axis from the first position, generally near the proximal end, toward the distal end.

103. (new) The ball bat of claim 90, wherein the wall thickness of the second tubular wall transition region generally increases non-linearly along the longitudinal axis from the second position, generally near the distal end, toward the proximal end.

104. (new) The ball bat of claim 90, wherein the wall thickness of the hitting portion is within the range of 0.045 to 0.120 inches.

105. (new) The ball bat of claim 90, wherein the hitting portion has inner and outer tubular surfaces, wherein the diameter of the inner tubular surface varies by at least 0.005 inches along its length, and wherein the diameter of the outer tubular surface is substantially uniform along its length.

106. (new) The ball bat of claim 90, wherein the hitting portion has inner and outer tubular surfaces, wherein the diameter of the inner tubular surface is substantially uniform along its length, and wherein the diameter of the outer tubular surface varies by at least 0.005 inches along its length.

107. (new) A ball bat comprising:

a substantially tubular frame extending along a longitudinal axis having a handle portion and a primary hitting portion; the hitting portion including first, second, third and fourth separate portions, the wall thickness of the hitting portion varying along its length such that at least the first and second separate portions of the hitting portion each have thickness greater than the average thickness, and at least the third and fourth separate portions of the hitting portion each have a wall thickness below the average wall thickness value.

108. (new) The ball bat of claim 108, wherein at least one of the third and fourth separate portions is positioned between the first and second portions of the body.

109. (new) The ball bat of claim 108, wherein each of the first, second, third and fourth portions have a length of at least one inch.

110. (new) The ball bat of claim 108 wherein the differential in wall thickness of hitting portion between at least one of the first and second portions and at least one of the third and fourth portions is within the range of 0.003 to 0.050 inches.

111. (new) The ball bat of claim 108 wherein the differential in wall thickness of hitting portion between at least one of the first and second portions and at least one of the third and fourth portions is within the range of 0.005 to 0.015 inches.